

at least one vane-type piston having a rectangular body with the same height as of said rotor and being positioned in said at least one radial rectangular groove of said rotor;

wherein said at least one vane-type piston is provided with a means of moving in a radial direction within said grooves of said rotor with an outer face tightly contouring an inner surface of said stator;

said rotor being positioned in said stator concentrically to cylindrical surfaces forming the hollow core thereof; and at least one side cover lid of said stator.

7. The four-cycle, multi-chamber rotary internal combustion engine as claimed in claim 6, further comprising a cavity within the stator wherein a radius of the inner surface of the stator is the same as a radius of the rotor, forms a combustion chamber.

8. The four-cycle, multi-chamber rotary internal combustion engine as claimed in claim 7, wherein a space between an outer surface of the rotor and the inner surface of the stator with a bigger radius form a working chamber.

9. The four-cycle, multi-chamber rotary internal combustion engine as claimed in claim 8, wherein said combustion chamber is connected with said working chamber via openings in an area of the ramp surfaces connecting the two concentric cylindrical surfaces of said stator;

wherein timing of compressed fuel mixture between said combustion chamber and said working chamber is controlled by valves.

10. The four-cycle, multi-chamber rotary internal combustion engine as claimed in claim 9, wherein fuel mixture and exhaust gasses in and out of said working chamber is controlled by an intake valve and an exhaust valve positioned nearby an opening of a power valve and an opening of compression valve, connecting said combustion chambers and said working chambers.